

2015 Space Weather Workshop Agenda

Millennium Hotel Ballroom

Monday, April 13

9:00 - 4:50 **GOES-VW (NEXT) Requirements Session**

5:00 - 7:00 **Welcome Networking Session (NCAR Mesa Lab – 1850 Table Mesa Drive)**
Bus transportation available

Tuesday, April 14

8:30 **Conference Welcome**
Brent Gordon, NOAA/SWPC

8:35 **State of the Space Weather Prediction Center**
Tom Berger, NOAA/SWPC

8:45 **Space Weather in Boulder: A Brief History**
Ernest Hilder, Former Director, Space Environment Center

9:10 **Solar Maximum...We Hardly Knew Ye**
Doug Biesecker, NOAA/SWPC

9:25 - 9:45 **Break**

9:45 - 11:15 **Space Weather National Strategy**
Chair: William Murtagh, Office of Science and Technology Policy

9:45 **Task Force Overview**
Co-leads: Tamara Dickinson, OSTP/Louis Uccellini, NWS

10:00 - 11:15 **Panel: Goal Team Leads**
Seth Jonas, STPI; Andrew Sabata, FEMA; Sarah Ellis Peed, DHS; Tom Berger, SWPC; Chris Cannizzaro, DOS

11:15 - 12:15 **DSCOV**
Chair: Alysha Reinard, CIRES

11:15 **DSCOV – Halfway to L1**
Doug Biesecker, NOAA/SWPC

11:35 **Instrumentation - Capabilities and Calibration Test Plans**
Adam Szabo, NASA/GSFC

11:55 **Space Weather Follow-on**
Pat Mulligan, NOAA/NESDIS

12:15 - 3:00 **Lunch**

1:00 - 3:00 **Poster Session - General Space Weather Activities and Operational Services & Solar and Interplanetary Research and Applications (Two Groupings)**

3:00 - 4:40 Space and Ground Based Observations and Advances

Chair: Howard Singer, NOAA/SWPC

3:00 GOES-VW Workshop Summary

Rodney Viereck, NOAA/SWPC

3:20 Solar Data for Space Weather Forecasts from GONG

Frank Hill, National Solar Observatory

3:40 The Ionospheric Connection Explorer: ICON

Elsayed Talaat, NASA/Heliophysics

4:00 Imaging the Boundary Between Earth and Space - A Preview of Space Weather Data from the Global-scale Observations of the Limb and Disk (GOLD) Mission

Richard Eastes, University of Central Florida

4:20 Impact of FORMOSAT-7/COSMIC-2 on Ionospheric Space Weather Monitoring

I-Te Lee, Central Weather Bureau - Taiwan

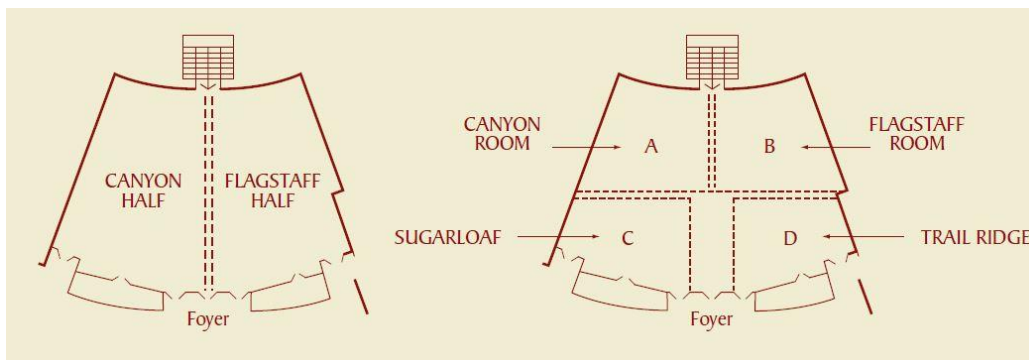
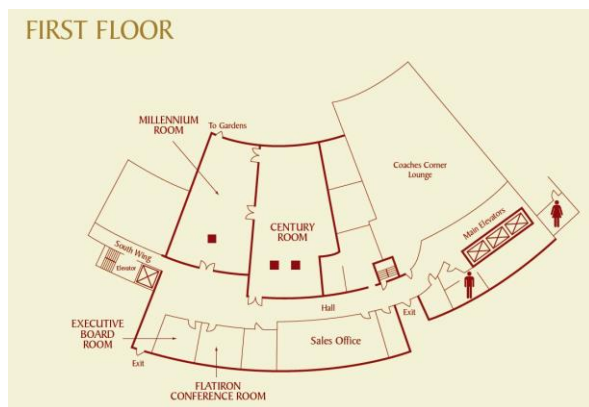
4:40 Space Weather Ballooning

Tony Phillips, SpaceWeather.com

5:00 End of Session

5:30 - 7:30 9th Annual SWPC - Commercial Space Weather Interest Group (CSWIG) / American Commercial Space Weather Association (ACSWA) Summit Meeting - by invitation

Millennium Hotel Meeting Rooms



Wednesday, April 15

8:30 - 8:40 Space Weather Morning Forecast Brief
Dave Marshall, SWPC Space Weather Forecasting Office

**8:40 - 10:10 Commercial Space Weather Interest Group (CSWIG)/
American Commercial Space Weather Association (ACSWA)
Roundtable Session: “Growing the Space Weather Enterprise”**

Featured Speakers:

Major General Steve Denker, Director, Integrated Air, Space, Cyberspace and ISR Operations, Air Force Space Command
Space Weather - Key Element to Space Domain Awareness

Dr. David Chenette, President and CEO, Celdex Space, LLC
Success and Challenges in Government-Industry Partnering

Dr. Conrad C. Lautenbacher, Jr., Chief Executive Officer, GeoOptics, Inc.
Growing the Space Weather Enterprise: Building a Committed Partnership

Panel: Featured Speakers

Moderator and Organizer:

Dr. Devrie Intriligator, Director, Space Plasma Laboratory, Carmel Research Center, Inc.

10:10 - 10:30 Break

10:30 - 12:00 Panel: Agency Activities
Chair: Tom Berger, NOAA/SWPC

10:30 NASA Heliophysics Division
Lika Guhathakurta, NASA/Heliophysics

10:45 Space Weather Research at the National Science Foundation
Vladimir Papitashvili, NSF

11:00 United States Air Force Weather
Ralph Stoffler, AFW

11:15 National Weather Service
Bill Lapenta, NOAA/NWS

11:30 NESDIS
Greg Mandt, NOAA/NESDIS

11:45 Question and Answer Session

12:00 - 3:00 Lunch

1:00 - 3:00 Poster Session - Ionosphere Research and Applications

- 3:00 - 3:20** **Superflares on Solar Type Stars and Their Implications on the Possibility of Superflares on the Sun**
Kazunari Shibata, Kyoto University
- 3:20 - 4:40** **Space Weather Impacts: Emerging Issues in Aviation**
Chair: Robert Rutledge, NOAA/SWPC
- 3:20** **NIOSH Aircrew Studies**
CAPT Barbara Grajewski, U.S. Public Health Service
- 3:40** **Rockwell Collins GLOBALink Voice Services / Impact of Solar Event on HF Communications**
Hugh Pat Guido and Anthony Abate, Aeronautical Radio, Incorporated (ARINC)
- 4:00** **EURADOS Activities on Space Weather Effects: Comparison of Codes Assessing Radiation Exposure of Aircraft Crew during Solar Energetic Particle Events**
Peter Beck, Seibersdorf Laboratories
- 4:20** **Establishment of Requirements for Space Weather Information Service by the International Civil Aviation Organization (ICAO)**
Terry Onsager, NOAA/SWPC
- 4:40** **TBD**
- 5:00** **End of Session**
- 6:00 - 8:30** **Banquet Dinner at UCAR Center Green Auditorium**
Bus transportation available

Special Guest Speaker:

Dr. Sandy MacDonald

Director, NOAA's Earth System Research Laboratory
"Science on a Sphere"



Available Shuttle Bus to the Banquet:

There will be one 50 person bus departing the Millennium Hotel at 5:45 pm for anyone who wishes to ride to UCAR Center Green. The bus will depart the UCAR Center Green for the Millennium Hotel at 8:50 pm.

Parking:

Free parking is available at the UCAR Center Green Campus for those who wish to drive personal vehicles.

UCAR Center Green Campus
Building 1
3080 Center Green Drive
Boulder, CO 80301

Thursday, April 16

- 8:30 - 8:40 Space Weather Morning Forecast Brief**
Meghan Stockman, SWPC Space Weather Forecasting Office
- 8:40 - 10:20 Space Weather Impacts: Power Grid (Continued)**
Chair: Chris Balch, NOAA/SWPC
- 8:40 Solar Shield: Update and Path Forward**
Antti Pulkkinen, NASA/GSFC
- 9:00 NERC Reliability Standards for Geomagnetic Disturbances**
Frank Koza, Pennsylvania-New Jersey-Maryland Interconnection (PJM)
- 9:20 System Impact Modeling**
Tom Overbye, University of Illinois
- 9:40 Assessing the Impact of Space Weather on the Electric Power Grid Based on Insurance Claims for Industrial Electrical Equipment**
Karel Schrijver, Lockheed Martin
- 10:00 Information Needed from GMD Forecasters**
Trevor Gaunt, University of Cape Town
- 10:20 - 10:40 Break**
- 10:40 - 12:00 Research to Operations (R2O) and Modeling**
Chair: Michele Cash, CIRES
- 10:40 Space Weather Prediction Testbed: Status and Update**
Rodney Viereck, NOAA/SWPC
- 11:00 Developmental Testbed Center: Facilitating R2O for Numerical Weather Prediction**
Louisa Nance, Developmental Testbed Center - NCAR
- 11:20 Advancements in Empirical Geomagnetic Field Modeling During the THEMIS and Van Allen Probes Era**
Grant Stephens, Johns Hopkins University Applied Physics Laboratory
- 11:40 Ensemble Assimilation Using First-Principles Models as a Tool for Three-Day Space Weather Forecasts**
Geoff Crowley, Atmospheric and Space Technology Research Associates (ASTRA)
- 12:00 - 3:00 Lunch**
- 1:00 - 3:00 Poster Session - Magnetosphere Research and Applications**
- 3:00 - 3:20 Space Weather Journal Overview and Prospectus**
Delores Knipp, Space Weather Journal
- 3:20 - 5:00 International Coordination of Space Weather Activities**
Chair: Terry Onsager, NOAA/SWPC
- 3:20 Predicting Space Weather: Impact on Fugro Offshore Precise Positioning Services**
Yahya Memarzedeh, Fugro Worldwide

- 3:40** **International Committee on Global Navigation Satellite Systems (ICG)**
Shafa Gadimova, Office for Outer Space Affairs (UN)
- 4:00** **State of GNSS in Africa: Applications, Observational Infrastructures, Research Implications and Prospects**
Babatunde Rabi, Nigerian National Space Research and Development Agency
- 4:20** **ESA SSA Space Weather Service System**
Juha-Pekka Luntama, European Space Agency (ESA)
- 4:40** **UK Met Office Update**
Mark Gibbs, UK Met Office
- 5:00** **End of Session**

Friday, April 17

- 8:30 - 8:40 Space Weather Morning Forecast Brief**
Meghan Stockman, SWPC Space Weather Forecasting Office
- 8:40 - 10:00 Research to Operations (R2O) and Modeling (Continued)**
Chair: Howard Singer, NOAA/SWPC
- 8:40 Community Coordinated Modeling Center: Pioneering the Path from Research to Operations**
Masha Kuznetsova, NASA/CCMC
- 9:00 Transitioning the SWMF Geospace Model into Operations at the National Weather Service**
George Millward, CIRES
- 9:20 Integrated Dynamics in Earth's Atmosphere - IDEA**
Rodney Viereck, NOAA/SWPC
- 9:40 WSA/ADAPT (Air Force Data Assimilative Photospheric Flux Transport)**
Nick Arge, Air Force Research Laboratory
- 10:00 - 10:20 Break**
- 10:20 - 11:40 Space Weather: The Future**
Chair: Rodney Viereck, NOAA/SWPC
- 10:20 Carrington L5 Mission**
Markos Trichas, Airbus Defense and Space
- 10:40 Opportunities in the First Solar Maximum with Social Media**
Elizabeth MacDonald, NASA
- 11:00 USGS Induction Hazard Science**
Jeff Love, USGS
- 11:20 Four-Year Plan for World Meteorological Organization Space Weather Activities**
Terry Onsager, NOAA/SWPC
- 11:40 Closing Remarks**
Tom Berger, NOAA/SWPC
- 12:00 End of Conference**